

# ABS2~ABS10

## Single Phase 1.0Amp Glass passivated Bridge Rectifiers

### ABS

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Glass passivated Junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C/10 seconds at terminals

### Mechanical Data

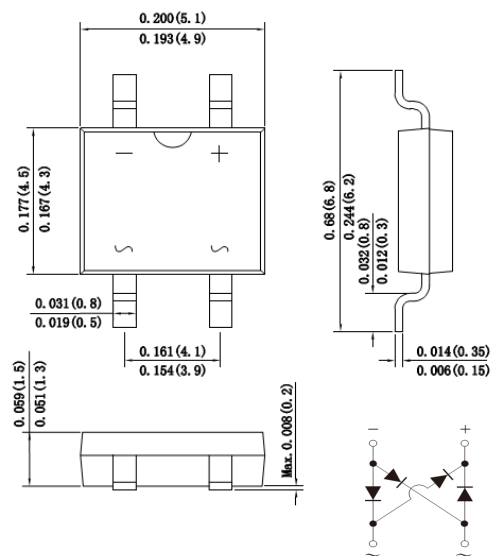
**Case :** Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any

**Weight :** 0.0034 ounce, 0.098 grams



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Parameter  | SYMBOLS        | ABS2        | ABS4 | ABS6 | ABS8 | ABS10 | UNITS                     |
|--|----------------|-------------|------|------|------|-------|---------------------------|
| Maximum repetitive peak reverse voltage  | $V_{RRM}$      | 200         | 400  | 600  | 800  | 1000  | V                         |
| Maximum RMS voltage  | $V_{RMS}$      | 140         | 280  | 420  | 560  | 700   | V                         |
| Maximum DC blocking voltage  | $V_{DC}$       | 200         | 400  | 600  | 800  | 1000  | V                         |
| Maximum average forward rectified current at $T_L=100^\circ\text{C}$ On glass-epoxy P.C.B (Note 1)     | $I_{(AV)}$     | 1.0         |      |      |      |       | A                         |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load                     | $I_{FSM}$      | 35.0        |      |      |      |       | A                         |
| Rating for fusing ( $t=8.3\text{ms}$ , $T_A=25^\circ\text{C}$ )  | $I_t^2$        | 5.08        |      |      |      |       | $A_s^2$                   |
| Maximum instantaneous forward voltage at 1.0A  | $V_F$          | 1.10        |      |      |      |       | V                         |
| Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$ | $I_R$          | 5.0<br>500  |      |      |      |       | $\mu\text{A}$             |
| Typical junction capacitance (Note 2)  | $C_J$          | 16.0        |      |      |      |       | pF                        |
| Typical thermal resistance   | $R_{qJA}$      | 80.0        |      |      |      |       | $^\circ\text{C}/\text{W}$ |
| Operating junction and storage temperature range   | $T_J, T_{STG}$ | -55 to +150 |      |      |      |       | $^\circ\text{C}$          |

**Note:** 1. Mounted on glass epoxy PC board with 1.3\*1.3mm solder pad  
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

## Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

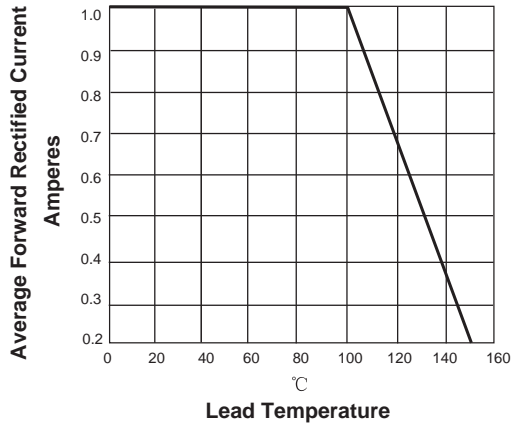


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

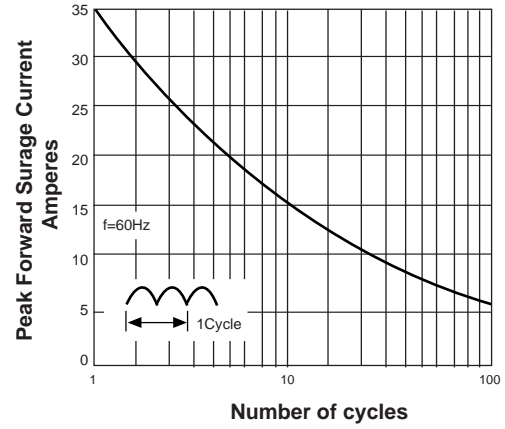


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

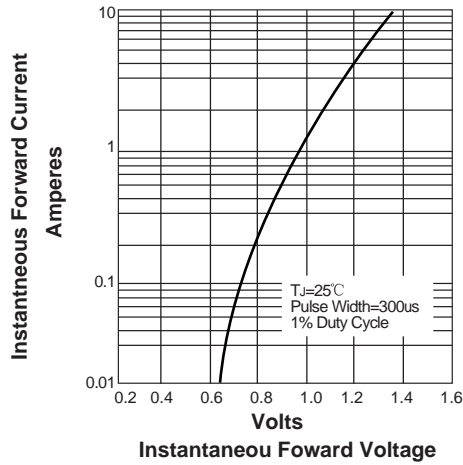


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

